



## A FOUR-PHASE APPROACH TO IN-SERVICE TRAINING OF PRIMARY SCHOOL TEACHERS: EMERGING LESSONS FROM ETHIOPIA

Tamirat Gibon Ginja & Xiaoduan Chen |

**To cite this article:** Ginja, T. G., & Chen, X. (2020). A four-phase approach to in-service training of primary school teachers: Emerging lessons from Ethiopia. *Futuristic Implementations of Research in Education (FIRE)*, 1(2), 78-89.

**To link to this article:** <http://firejournal.org/index.php/fire/article/view/27/>



© 2020 The Author(s). This open access article is distributed under a Creative Commons Attribution-NonCommercial-NoDerivatives (CC-BY-NC-ND) 4.0 license.



Published online: 27 October 2020.



Submit your article to this journal [↗](#)



## PROFESSIONAL EDUCATION AND TRAINING | RESEARCH ARTICLE

### A Four-Phase Approach to In-Service Training of Primary School Teachers: Emerging Lessons from Ethiopia

Tamirat Gibon Ginja\*, & Xiaoduan Chen

Received: 27 August 2020

Accepted: 14 October 2020

Published: 27 October 2020

\*Corresponding author:  
Tamirat Gibon Ginja,  
Shaanxi Normal University,  
CHINA

E-mail: gibontamirat@snnu.edu.cn

Additional information is  
available at the end of the  
article.

**Abstract:** Although the field of in-service training is gaining international interest, little attention has been paid to the training approach. This article described the successful implementation of a possible in-service training approach to develop current primary school teaching practices and lessons learned for future in-service training in Ethiopia. This qualitative study explored the practices of primary school teachers, a kind of approach to in-service training, and the attitudinal changes that occurred through the training. Data were obtained from purposively selected participants such as teachers, supervisors, and the project team through observation, a semi-structured interview, and a review of documents. The findings indicate in-service training on 'modern teaching of methods' has a positive impact on the pedagogical knowledge, skills, and behavior of primary school teachers. More intensive cooperation between the different partners has led to an increase in the number of end-users and the quality of in-service training programs. The initiative followed a four-phase approach to in-service training and brought changes in teachers' practices and attitudes. Finally, implications for future programs are discussed, and a four-phase approach to in-service training is proposed.

**Keywords:** In-service training, teaching methods, professional development, approach to training, Ethiopia.

Changes in a country's education system and global demands call for staff development activities. Studies show that the quality of education is influenced directly by the quality of classroom teaching (Chen, 2013). A teacher is primarily responsible for ensuring the quality of teaching through effective teaching methods and taking into account the dynamic nature of the students (Desta et al., 2013; Zhou & Brown, 2015). Given that there is a large body of research attesting to the lack of confidence of unqualified or under-qualified teachers in the implementation of the national curriculum in primary school, for which the most common solution and the more widely recommended is the call for greater availability of in-service training (Beauchamp, 1997).

In Ethiopia, one of the major challenges for teachers at the primary level is a lack of pedagogical knowledge, particularly in applying student-centred methods of teaching (Abebe & Woldehanna, 2013). UNESCO's conclusion from the needs assessment also shows that teaching methodologies do not take into account a student-centred approach in Ethiopia (UNESCO, 2013). Cognizant that Ethiopia has undergone policy changes in teacher education to improve the teaching profession for the last three decades. Following the introduction of the new Education and Training Policy and Education Sector Strategy in 1994, the Ministry of Education has designed and implemented a series of Education Sector Development Programmes (ESDP I, ESDP II, ESDP III, ESDP IV, and ESDP V). The aim was to provide all levels of general education with academically and pedagogically qualified,

motivated, and ethical teachers. The proportion of primary teachers with a diploma was expected to increase from 38% to 100% by 2014/15. By 2013/14, 70% of primary-level teachers had the required qualifications (Ministry of Education, 2015). While this development is not on track, it should not be underestimated as the proportion of qualified to a diploma or above teachers nearly doubled. When the number of teachers was increasing by more than 30%, and the student-teacher ratio was declining from 51 to 47. In this regard, significant improvements are observed during the implementation of ESDP IV quantitatively. However, teachers' pedagogical skills are still below the level required to apply active teaching and the student-centred methods required by the new curriculum (Ministry of Education, 2015). Studies confirmed that the quality of teaching has deteriorated, and student performance has declined in Ethiopia (Gemedo & Tynjälä, 2015).

To address this problem, Ethiopia has taken some steps to equip teachers with pedagogical knowledge and skills through in-service training as an integral part of a continuous professional development (CPD) program. It is recognized that if teachers have sufficient professional knowledge and personal practical knowledge, they will become active curriculum planners for schools and have the potential to transform from 'cook' to 'chef' while teaching (Kabadayi, 2016). As the metaphor 'cook versus chef' indicates, they must develop into a 'master' through in-service teacher training courses. It is known that some teachers seem to have prerequisite skills and theoretical pedagogical knowledge and metaphorically 'cook' when they graduate. They must be metaphorically equipped with more recent knowledge as 'chef' to contribute more to a sustainable education in the society where they already are involved (Kabadayi, 2016). However, the Ethiopian government efforts have been hampered by low-quality in-service training provision. As studies indicated, the challenge is that the in-service training program was too focused on the expansion of the program without consideration of what happens inside the schools (Akalu, 2016; Gemedo et al., 2014; People In Need, 2014). In-service training programs for teachers are continuously organized, but very little information is available on whether the training experiences have improved practices of teachers in the classroom (Gemedo et al., 2014). Besides, teachers taking in-service training often complain that training provision is too theoretical and too far from their daily work experience (Akalu, 2016; Ginja, 2016). Moreover, an approach to in-service training is inconsistent and fragmentary (People In Need, 2014). Furthermore, there is insufficient research to demonstrate the short- and long-term effects of in-service training in educational practices.

This situation prompts researchers to explore in-service training practices, procedures, content, and their impact on the educational practices to suggest a dynamic and clear approach to further in-service training. In-service training of teachers is applied differently in different countries, but there are also similarities. For example, all teachers from countries such as China, Estonia, Finland, Japan, and Singapore have to go through a period of in-service training, and most of them use a mentoring system and send them to courses, seminars and training organized by universities, Colleges of Teacher Education and non-governmental organizations to prepare novice teachers for their professional lives (Tonga et al., 2019). In Ethiopia, likewise, the government and non-governmental organizations (NGOs) have offered several short and long-term professional development programs for teachers in order to enhance teachers' skills and attitudes (Abebe & Woldehanna, 2013). For example, the Gedeo zone is one of the educationally struggling areas in Ethiopia, and there was a successful initiative to promote modern teaching methods (MTM) through in-service training in partnership with the Bureau of Regional Education and People in Need in Ethiopia. The Bureau of Regional Education is a government agency responsible for overseeing schools, while People in Need Ethiopia is a non-governmental organization providing in-service training and financial support. Since the initiative 'Modern Teaching Methods LEAD to Quality Education' project was being implemented to enhance in-service teachers' practices and procedures, the following guiding research questions were formulated to conduct this study. The research questions are: 1) How do in-service teachers describe their participation and practices of MTM training? 2) What kind (s) of approach (s) to in-service training is/are involved in the training? 3) How do teachers explain changes in attitude and behavior after the training?

The research undertaken aimed to explore the process of in-service training of primary school teachers and its practice in Ethiopia. The significance of the study is to outline the possible in-service training approaches and identify lessons learned for future in-service training provision.

## 1. Literature Review

The literature on learning theory informs social-cognitive theory and makes some assumptions about the learning and implementation of pupils' behavior. Learning theory is the path to a continuous learning process. It further clarifies how teachers can influence students' performance and learning. These assumptions address the give-and-take interactions among persons, behaviors, and environments (Bandura, 1971; Higgins et al., 2011; Schunk, 2012). The self-efficacy theory derived from Bandura's social-cognitive theory and the concept of constructivism has provided a solid theoretical framework for this study. It is believed that mastery experiences create a greater chance of self-effectiveness, meaning that the better a teacher masters a task, the more self-efficacy improves (Gidalew & Van den Berg, 2018). For example, socio-cultural learning theories (Bandura, 1971; Higgins et al., 2011) describe the importance of collaboration in the context of teachers' learning processes. It is assumed that people are active learners (Schunk, 2012). This concept seems to have recently arrived on the learning scene; the premise is that learners construct an understanding that supports many learning principles. In this case, activities such as observing phenomena, collecting data, generating and testing hypotheses, and collaborating with others can be part of a significant learning process. According to this viewpoint, learners are actively involved in the content by manipulating materials and social interaction (Schunk, 2012; Zhou & Brown, 2015).

This condition indicates how continuous professional development (CPD) of teachers is essential to improve the learning-learning process and thereby improve the quality of education (Desta et al., 2013). The term in-service training is used for a range of activities designed to contribute to teacher learning in the workplace (Craft, 2004). It is considered as a planned event, a series of comprehensive school learning activities (Bane, 2015). Some countries, for example, the United Kingdom, on the quality in-service training provision emphasizes (Goodyear, n.d., p. 381):

- training needs assessment at different levels, those of the individual teacher, the school and the authority;
- the continuity and relevance of the training based on the current knowledge and skills of the teachers;
- its practical and pragmatic character;
- that it should then be carefully evaluated and, if successful, disseminated.

The quality of in-service training enables teachers to improve the quality of their practice through professional learning and development (Higgins et al., 2011). In-service training increases the quality of the individual teacher and the productivity of the school (Ayvaz-Tuncel & Çobanoğlu, 2018). In turn, the excellence of an individual teacher determines the quality of teaching and the success of students (Copriady et al., 2018).

The in-service training program is compulsory for all primary teachers in Ethiopia (MoE, 2010). Currently, the in-service training activities in Ethiopian primary are designed to promote active learning, problem-solving, and student-centred teaching. According to Continuous Professional Development for Primary and Secondary Teachers, Leaders and Inspectors in Ethiopia: Practical Toolkit (2009), each school has to identify its in-service training needs, produce an annual CPD plan, and design and deliver a CPD School Module. The purpose of the in-service training is to improve student achievement, improve classroom practice, and help teachers to become better teachers by enhancing their professional competence. Teachers are encouraged to work with at least one other colleague at all times through the process. Every teacher is required to spend at least sixty hours a year on CPD (Ministry of Education, 2009). This can be, for example, attending a workshop, staff meeting, or discussion group, observing another teacher, visiting another school, or accomplishing team teaching. The schools decide their activities which are obligatory for all teachers, and teachers plan their in-service training programs for the year. School-directors should lead teacher groups with the close support of Cluster-supervisors and ideally should meet once every two weeks. The schools are encouraged to use the help of university experts, members of NGOs, or the community by implementing their in-service training programs. However, based on our personal experiences, the in-service training program in Ethiopia is patchy due to some persistent obstacles. These barriers include the contradictions between traditional perceptions of learning and modern teaching aspirations, limited resources related to equipment, books, and funding for in-service training. Thus, People in Need Ethiopia (NGO) has been involved in the provision of in-service training and financial support.

## **2. Methodology**

### **2.1. Context and participants**

In this study, qualitative pedagogical research methods were used to analyze the process of in-service training of primary school teachers and its practice in Ethiopia (Gurung & Schwartz, 2009). Using this design, an attempt is made to understand how teachers interpret their experiences; what is the approach to the training; and how it affects teachers' attitude and behavior. Subsequently, it enabled me to learn an emerging lesson. The study focused on one in-service training topic, among other areas of the training.

The project entitled "Modern Teaching Methods LEAD (an acronym that stands for Learn, Engage, Apply and Develop) to Quality Education" was launched by People In Need Ethiopia and Southern Regional Education Bureau in the Gedeo zone in 2015. A purposive sampling technique was used to recruit respondents since this technique provides with a significant opportunity to understand how the training has played a role in ensuring effective instruction (Merriam & Tisdell, 2016).

Eight in-service teachers participated in the study, taking into account two frameworks i.e., (1) cluster-based school administration to consider school context, and (2) school-based selection approach to consider the subject-specific teaching process and individual teacher's experience. In each school, language, mathematics, natural science, and social science subjects' teachers were targeted using purposive sampling to consider subject-specific phenomenon. Thus, four teachers (1 from each subject area) included from one cluster, and the other four from the rest cluster formed in the same way. When selecting groups, it was decided to take into account the availability of trained teachers who attended all stages of the training successfully and the functionality of the training by using availability sampling. Moreover, two supervisors and two project teams were included purposively. Therefore, a total of twelve participants were involved in this study.

### **2.2. Data collection and analysis**

Data were collected through observation, semi-structured interviews, and document reviews. The first data were collected by observing three teachers for three days, throughout the school day. A total of nine classes were observed (three teachers for three-times in different classes). Each day, the researcher gathered data through a whole day observation of the teachers' activities and collecting artifacts. The researcher monitored the lessons where interactive teaching methods were used. The lessons were given by three in-service teachers.

After each day of observation, the teacher was interviewed by a semi-structured interview schedule to clarify his/her activities. The researcher discussed their teaching and their opinions about the new methodology. The interviewer used a semi-structured approach, with a set of fixed questions. Some interview questions, for example, "why you decided to attend the training, what was the aim of the training? how do you describe your lesson planning practices before the training and after the training? What were the introduced approaches in the training? what impressed you the training, what you gained from the training? and what improvements achieved in your classroom specifically, and in your school generally?" were emphasized. Interview questions are derived from the basic questions so that the purpose of the study can be addressed. Each interview was recorded and transcribed verbatim to facilitate subsequent data analysis. The interviews were encouraged to talk freely. So, there was room for open discussion.

Researchers' diaries, project documents, and reflections of supervisors and teachers were reviewed. Using these various sources helped to deal with bias and ensure the validity of the results. The researchers did constant reading and re-reading before describing the phenomenological account and due attention paid to effective practices and training phases. The collected data were transcribed and developed into categories and subcategories or themes of information and compiled into narratively to form the general explanation (Creswell, 2015).

## **3. Findings**

### **3.1. Objectives and practices of the training**

The 'Modern teaching methods (MTM)' training focused on improving the teaching-learning process through the use of modern teaching methodologies. Document review and discussions identified that the training was intended to:

- integrate active learning methods for teaching and the learning process;
- identify the roles and activities suggested in the ERR (stands for Evocation, Realisation, and Reflection) framework of thinking and learning;
- apply performance-based continuous assessment and evaluation procedures;
- develop a professional teacher portfolio to be used as a reference for their future teaching and as a proof of their capacity development;
- produce self-reflective professionals; and
- promote the use of active learning methods in their schools by sharing their knowledge and skills.

Interviews with participants and document review revealed the training grounded on the socio-pedagogical constructivist theory of learning, which assumes that all the learners are unique and the most effective way to build their knowledge through connecting the 'old' with the 'new' in a meaningful way. At the beginning of the training, in-service teachers were introduced with concepts like active learning, critical thinking, and effective questioning; and the significance of the theory behind these concepts. A brainstorming exercise was the foremost used practice to bring out teachers' experiences and ideas. Then the theory and its principles were explained through discussion. Finally, as one of the study respondents explained, teachers tried to examine each of the principles like "learning is social and individual", "prior knowledge is a base for the new learning", "learning is an active process" and "each student is unique" (Mr. Z). Thus, most of the trainees seemed to be aware that the mentioned principles are convincing for students' learning. The supervisors and project team respondents also agree with the above idea.

As stated in the project document, one of the practical tools grounded on socio-pedagogical constructivism theory is the ERR (stands for Evocation, Realisation of Meaning, and Reflection) framework of thinking and learning (People In Need, 2014). Most of the respondents in the present study emphasized that the teachers were allowed to compare the traditional and ERR lesson plans through discussion. According to them, this simple framework helped teachers to convey knowledge in a very effective way, where it served as the foundation for organizing the methods and delivering the content. According to the interview respondents, each step of ERR explained and participants compared with the ones in their previous lesson procedure. Mrs. X, one of the participant teachers, described the situation as:

*In the past, I was not using the lesson plan frequently. But after the training, as I became eager to apply ERR since it has varieties and avoids boring contexts that I have been facing before. Now, I am using it frequently thanks to the MTM training (Mrs. X).*

All the interviewed teachers were admired on how each step of the ERR gives attention to students' learning and their active involvement different from their (teachers) earlier experiences and learned knowledge in pre-service training. One of the senior teachers, Mr. A said, "the evocation was highly motivating to the students to the new lesson particularly. It also helped the teacher to adjust his or her lesson" (Mr. A). The finding of the document review declared that teachers' sample lesson plans proved how they were getting familiarized with the concept of ERR after the training.

### 3.2. Methods of Teaching

Respondents in this study identified some strategies of modern teaching. For example, "little pebbles, Freewriting, ReQuest procedure, Brainstorming, Cinquain, Enhanced lecture, Venn diagrams, Comparative table, Ranking, 5 – 1 – 4, Mind map, Know / Want to know / Learn (K-W-L), Rotating questions, Three-step interview, Matching, and Post office". As reported, teachers were able to use a variety of the methods, for example, "rotating questions, brainstorming, Venn diagram, mind map, request procedure, enhanced lecture, and three-step interviews in their classrooms" (Mr. Y). All of the respondents, except two, found the introduced methods of teaching are very useful for them and their students. Those in favor stated that they learned a variety of techniques and got the chance to improve their classroom instruction. However, some teachers, namely, Mr. Z and Mr. Y, complained about its applicability since some kinds of methods require much time, deep understanding, and sufficient facilities. For example, Mr. Z was explained that "the presented methods were good, but our school context didn't allow me to apply fully". Mr. Y also reflected a similar idea with Mr. Z. According to the data obtained, there were three interrelated pieces of training, i.e., namely basic MTM, Advanced MTM, and Trainer of Trainer (TOT). These were delivered in different timeframes based on trainees' performances.

### 3.3. Basic MTM Training

The findings of the document review confirmed that the basic MTM training was provided for all in-service teachers who can attend. It took about 15 (5 - 5 - 5) days of intensive practice. According to study respondents, the first five days' training focused on sharing prior knowledge and experiences, understanding new concepts, and acquainting varieties of methods of teaching as basic training. The second 5 days focused on actual classroom practices with intensive observation. The final five days phase was about micro-teaching and provision of feedback. According to the participants, micro-teaching intended to make participants practice how to use the methods appropriately in their lessons. It enabled them to use the new and previously introduced MTMs in their classrooms. All the participants shared an almost similar idea with the significance of this training and admired how it helped them.

### 3.4. Advanced MTM Training

Respondent teachers and the project team confirmed that selected best-performing trainees from basic training join Advanced MTM training phases. This training was four-days long. During the training, teachers were asked to exchange their experiences on previously introduced methods of teaching like “enhanced lecture and brainstorming”, and new methods such as “a trunk and roots, jigsaw puzzle, and our collective trees”. Moreover, the respondents shared their experience on the progress of ERR and the appropriateness of the methods. One of the respondent teachers (Mr. T) said: “lesson planning, experiences sharing, and brainstorming were very important activities among others in the course of Advanced MTM training”. Likewise, other topics such as continuous assessment, provision of feedback, and classroom (activities) management were discussed during the training. A considerable participant appreciated this phase as it helped them to stabilize the previous knowledge through revision and to wind up. However, only one respondent teacher did not find it helpful. He explained that he did not get new knowledge from this step of training.

### 3.5. Training of Trainer

Document review and discussion sessions revealed that, following advanced training, well-performed teachers were selected to join the TOT. The main goal of the TOT process was to equip teachers to train and coach other teachers. Interviewed teachers emphasized that this stage of the training was more appropriate and made them ‘master’ trainers. Interviewed teachers confirmed that the topics on the training content areas were useful.

### 3.6. Teacher's Attitudinal and Behavioral Change

#### 3.6.1. Improved Practice

All of the respondent teachers reflected a similar opinion that their motivation has changed. People in Need's the project final evaluation report, and schools annual report revealed, following the MTM training, in-service teachers' classroom instructional practices improved. The summary of improved practices includes:

- increased pedagogical knowledge and skills;
- improved positive attitude towards the profession;
- improved concentration of students during lessons;
- motivated to contribute to enhancing the teaching profession;
- contributed to the betterment of students' academic achievement;
- created a LEAD school where trained teachers working for role modeling; and
- established active experience sharing trend among novice teachers vs. experienced teacher, trained teacher's vs. non-trained teacher; and target schools vs. non-target schools.

The views of teachers in relation to the impact of in-service training on their pedagogical knowledge were inspiring. One of the respondent teachers (Ms. R) said,

*The training enabled me to identify different techniques of teaching that fit learners' characteristics. During the training, we were practicing through listing down different characteristics of children using Venn-diagram and then the explanation was given. It was very interesting and could benefit us a lot (Ms. R).*

According to Ms. R, the training helped her to differentiate instruction based on learners' interests. This a particular science teacher said: "my relationship with my students has improved significantly since I changed my instructional methods after the training attended" (Ms. R). Another respondent said, "the training increased my instructional performance in terms of knowledge, skills, and behavioral changes." Supervisors and project team also revealed the empowerment of teachers with new pedagogical knowledge and skills made them self-confident.

### 3.7. Progress Tracking Tools

The analysis of data from interviews, observations, and project documents declare the most acknowledged contribution of this training to the sector was developing progress tracking tools. As one participant explained: 'having an individual portfolio and LEAD checklist was tremendously a result of the training aimed at building a reliable system of documentation, monitoring, and measuring progress.' In-service teachers who attended the training were encouraged to develop a portfolio containing at least the following items:

- lesson plans following the ERR framework
- samples of students' work
- samples of teaching aids and materials prepared for the lessons
- plan for a microteaching session
- teacher's written self-reflection
- samples of the teacher's course work, handouts, other training resources

According to the interviewees and official reports, the LEAD concept was introduced during MTM training. As the project document stated, LEAD schools enable their students to Learn through Engagement and Application to Develop the skills they need for a productive life. Following the intensive training and practices, trained teachers in collaboration with the training providers developed a LEAD checklist which consisted eight key areas of measurement as a quality standard, i.e. active learning methods, students continue assessment, professional portfolios, active school club, instructional support, teacher-peer learning, school plans, and engaged parents (People In Need, n.d.). Interviewed teachers stated that they created the LEAD checklist after the training. As Mr. O said,

*We were drafting, presenting, and collecting comments, re-discussing, representing... hmmm there were so many backs and forth comments and finally, we did it. We have produced a good working checklist. This is in my experience, exemplary participation regarding producing such professional material. I must thank the training providers and funding organizations for their innovative idea.*

All respondents, except two, were admired with the function of the checklist and its relevance towards their profession. However, two of the participants complained about the use of the LEAD checklist because of two basic reasons. One of the burning issues raised was a somehow overlapping role of checklists developed by the government and LEAD checklist. The second concern was that teachers became overloaded with paperwork than ever. Respondents also reported that administering the checklist and its process takes more time than before.

### 4. Discussion

The entire process of education is shaped and molded by teachers, who play a pivotal role in any system of education. If the teachers are well trained, skilled, and highly motivated, learning will be improved (Ashrafuzzaman, 2018). Access to education and its quality is a long-term priority of the Ethiopian government (Ministry of Education, 2010, 2015). The current education and training policy (1994) pay due attention to in-service training offered at all levels of the education system, including primary education. It is recognized that in-service teacher training enhances professional skills, teaching methodology, and approaches, and develop teachers' attitudes (Ashrafuzzaman, 2018). Attempts have been made by the government, NGOs, and other stakeholders to get familiarized teachers with the theories and practice of student-centred methods and integrated approaches, which have in various socio-cultural contexts proven to enhance the learner's ability to learn (People In Need, 2014). In line with these efforts, in-service training on MTM was conducted in support of the regional government and People



In Need-Ethiopia. This research explored practices of in-service primary teachers' training to ensure effective teaching in the Gedeo Zone of southern Ethiopia.

Among approaches to in-service training have been implemented at different times and in different developing countries to provide training for practicing primary teachers (Peacock, 1993, p. 22), combinations of the following approaches applied in the targeted schools:

*'Cascade' models* in which cohorts of teachers receive short training and have to pass on their new knowledge and skills to other cohorts of teachers. For example, as indicated in the result of the study, three interrelated pieces of training (i.e., namely basic MTM, Advanced MTM, and TOT) being provided phase by phase based on the teachers' performance after the first MTM completion.

*'Training of trainers' models*, where teachers selected for their good practice, receive longer training as 'teacher mentors' of teacher training, cluster school, or schools as a basis. For example, following successful completion of advanced training, selected teachers were joining the TOT. The main goal of the TOT process was to equip teachers with the ability to train and coach other teachers furtherly.

*'Diffusion' strategies* in which specialist trainers move widely to conduct short training sessions in response to needs identified at the local or national level. For example, Education Experts from both People In Need and the bureau of regional education used to involve in 'diffusion'. This model has been used on a large scale and addressed many primary teachers. The diffusion strategy succeeded within the terms of its brief; LEAD checklists, training Modules, and teaching materials were made, used, and taken away by teachers, and the methods advocated in the Ministry's new policy documents were utilized throughout.

Indeed, apart from these, full-time degree or diploma courses in universities or Colleges of Teacher Education is a familiar approach to in-service that the government follows throughout the country.

Drawing on interviews, project documents, video, and self-reflection reports, this study outlined a four-phased approach of the in-service primary teachers' training based on participants' views and documented evidence. Except for a few cases, teachers held favorable views on the contribution of the in-service teacher training initiative. The participants believed that MTM training contributed a lot towards changing their (teachers') teaching practices. As recognized by participants, the training practices were effective for providing teachers with pedagogical knowledge and skills to adapt their methods of teaching and contribute to the development of the profession.

In the views of almost all teachers, active involvement is regarded as a significant success and shows that it is an essential aspect of the success of in-service training. A common aim of in-service training in countries such as China, Estonia, Finland, Japan, and Singapore are to help teachers realize their full potential. For this reason, the authorities in these countries regard the in-service training of their teachers as significant (Tonga et al., 2019). This opinion is consistent with the results of this study that in-service training contributed a lot to high-quality teaching practices. The training was well aligned with national policy and priorities (MoE, 2015), especially in the areas of MTM. We framed the training practices under the following a "four-phase approach" logical order.

#### **4.1. A four-phase approach to in-service training**

MTM training was guided by different phases with logically ordered activities that we call the 'Four-phase approach'. The design of the various sessions or phases in any professional development is the most important factor influencing its success (Cooper, n.d.). Concerning various sessions, Ms. X, one of the participants (teacher) described the situation as: 'all the processes and training conducted opened my professional eyes to see possible ways and to coordinate activities effectively.' It implies that this approach made the training practical and helpful. It has been witnessed teaching can be enhanced through the use of a

systematic 'four-phase approach' to train in-service teachers. The model of training presented in this study was simple, understandable, practical, and productive in such a single in-service training topic. According to the interview respondents, it was delivered in a way that engages teachers and provides them with what and how they need to improve classroom instruction. Hence, it served as the basic conceptual framework for this study. The basic steps in the four-phase approach to train were discussed as follows.

### **Phase 1: Pedagogical Content**

The pedagogical content, the first phase of the MTM training, focused on basic information about the training. In this phase, the practical aspects of pedagogical content and its principles are described. This phase was intense, with various aspects of the training details. First, the theory and principles of effective learning have been explained to teachers to let them know the theoretical basis and principles of the training stand. Besides, it was supplemented with practical recommendations on how to turn theories into classroom practice, how to develop critical thinking of students, etc. Second, a description of individual methods was the cornerstone and the critical component of the training. Apart from step-by-step instructions on how to use about 16 selected methods, it also offered a handful of practical tips and examples of classroom situations to reduce challenges and encourage teachers when trying for the first time. Third, another sub-segment of the training was assessment methods which presented a portfolio documentation approach to track student performance applying continuous assessment.

This phase gives attention to introducing the basics of the training through discussions, readings, and lectures. It was essential to have an understanding of the concepts behind a principle or strategy or skill that governs classroom teaching practice. The orientation of theory allows for the acquisition of skills by increasing the understanding of the demonstrations and by providing a mental image to guide practice and clarify feedback, and by promoting the attainment of executive control (Bruce & Showers, 2002). In this phase, participants' prior-knowledge and sharing their own experiences played an immense role in enhancing teachers' understanding. As a result, teachers declared how this phase equipped them with content knowledge of teaching methods and gave them confidence.

### **Phase 2: Classroom Practice and Observation**

This phase was a part of MTM training intended for a rehearsal of what was learned during the first phase of the training. This type of session took place in each teacher's respective classroom to prove the practical application of active learning methods while teaching various topics, at different grade levels and using official textbooks. Moreover, it inspired and encouraged teachers to try out the model lessons with their students. This session was supplemented by intensive observation. Observers were supposed to identify the learning issue to address further and to provide constructive feedback. Consequently, teachers enabled them to reach the trial in which what has been advised during the first phase of the training and improved in terms of lesson planning, using varieties, and assessing learning.

### **Phase 3: Micro-teaching and Feedback**

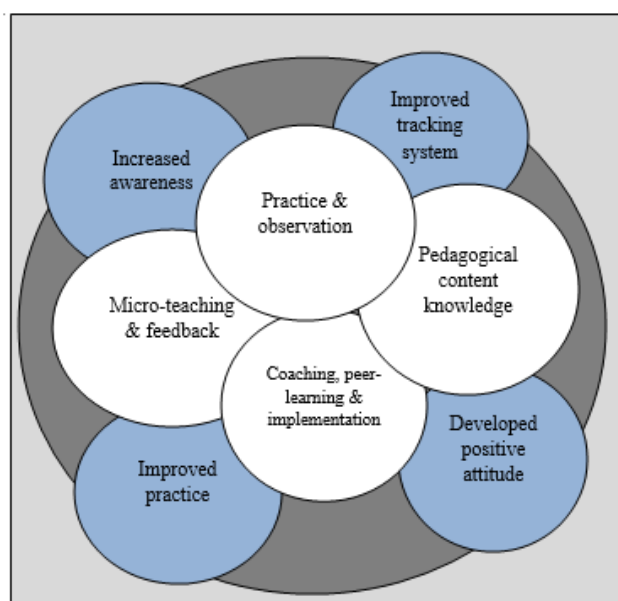
Following classroom practices of trainees and observations of supervisors and trainer, micro-teaching and feedback were taking place. During this stage, trainees were required to present at least one topic related to his/her subject matters by preparing ERR framed lesson plan and using appropriate instructional aid. It was the opportune time for teachers to enhance their skills and fill the gaps observed in both classroom teaching and micro-teaching. Moreover, teachers confirmed that they learned about the feedback give-and-take process during this phase exercise.

### **Phase 4: Coaching, Peer Learning, and Implementation**

This part of training is not exclusively training center-based provision rather than learning through actual implementation. It is an extended form of training. However, well-performing teachers could also join advanced MTM and TOT training at this stage; it attributes real implementation in the real setting. It is the juncture of transferring training concepts into actual practice. It has

no time boundary, ever-continuing process. It is the collaborative work of teachers to solve the problems or questions that arise during implementation based on experience and training drove ability. Peer coaching provides support for the community of teachers attempting to master new skills and to plan and develop lessons (Bruce & Showers, 2002). Coaching can involve an expert in the area or can come from a peer (Cooper, n.d.). According to him, the important thing is that the teacher has someone to interact with and receive feedback from while trying something new (Cooper, n.d.).

MTM training is meant to enable teachers to exchange their experiences and to gain new pedagogical knowledge and skills on varieties of active learning methods and other essential theories and principles of learning. To ensure effective teaching and development of the profession, it is important to employ the above crucial phases of the training and full interest, motivation, and involvement of both participants throughout all the components of the training. According to the respondents and reviewed documents, teachers' basic knowledge of teaching methods, awareness of educational theories and practices have been improved. Most importantly, a positive attitudinal change towards modern teaching methods, collaborative working culture, and know-how to ensure effective teaching have been observed. Furthermore, teachers started sharing their experiences, peer-learning, developing, and using progress tracking tools, coaching others, and contributing to their profession. Thus, somehow, it is possible to say the training influenced teachers' practices, attitudes, and behavior positively (Bruce & Showers, 2002). The flow of training was, somehow, in line with models of some researchers like Bruce & Showers (2002); Cooper (n.d.); and Craft (2004). To this end, we attempted to summarize the major points discussed in the previous pages in the following figure (1).



*Figure 1: A four-phase approach to in-service training framework*

Since the focus of the study was exploring the preparation of in-service teachers to ensure the effectiveness of the training, the above model is merely framed in this aspect. In the model, there are two generic layers. The insider layer is all about taking systematic actions that combine influences and practices, whereas the outsider is effects or changes after the training. It was started with various systematic sessions of training and progressed to teachers' attitudinal and behavioral change. Cooper (n. a.) considers also well-designed professional development can have an impact on teachers regardless of how they teach or the values they bring with them.

## 5. Conclusion

The findings of this study revealed that in-service MTM training has a positive impact on teachers' pedagogical knowledge, skills, attitudes, and behavioral change towards their profession, which is consistent with the previous finding (Ayvaz-Tuncel & Çobanoğlu, 2018). There are some indications of behavioral changes and effects that can be contributed to the in-service training as they represent a repeated pattern in the information provided by several respondents. As People in Need's project final evaluation report, and Schools annual reports stated that the change includes "increased student participation and confidence, empowerment of teachers, and more coordination and sharing encouraged by officials". The current study also proves that partnership is an essential factor in the improvement of teaching practices, which is consistent with a previous study

(Copriady et al., 2018). In terms of student learning outcomes, the results are improved in the majority of intervention schools. This training follows 'a four-phase approach' brought evident changes in practices and attitudes of teachers. We would suggest that the Ethiopian government should establish a uniform and strong strategic direction for regular long-term in-service MTM training of teachers in primary schools. In this regard, the findings of this study could be exemplary in terms of design, implementation, and the use of professional development tracking tools.

Various studies and research have shown that in-service training programs positively improve the quality of teacher education and ultimately benefit students (Ashrafuzzaman, 2018). This study also proved that the aforementioned phases of the in-service training program are beneficial for teachers. Therefore, we suggest, the rest of the schools should learn how to employ a four-phases approach to in-service training to address the needs of the entire educational system in Ethiopia.

### Disclosure of Conflict

The authors declare that they have no conflicts of interest.

### Author(s) Details:

Tamirat Gibon Ginja

School of Education, Shaanxi Normal University, Xi'an, CHINA

E-mail: [gibontamirat@snnu.edu.cn](mailto:gibontamirat@snnu.edu.cn)

ORCID ID: <https://orcid.org/0000-0002-6888-264X>

Xiaoduan Chen

School of Education, Shaanxi Normal University, Xi'an, CHINA

E-mail: [chenxiaoduan@snnu.edu.cn](mailto:chenxiaoduan@snnu.edu.cn)

ORCID ID: <https://orcid.org/0000-0002-2286-1130>

### References

- Abebe, W., & Woldehanna, T. (2013). Teacher training and development in Ethiopia. *Young Lives*, 32.
- Akalu, G. A. (2016). Interrogating the continuing professional development policy framework in Ethiopia: A critical discourse analysis. *Professional Development in Education*, 42(2), 179–200. <https://doi.org/10.1080/19415257.2014.940627>
- Ashrafuzzaman, M. (2018). Impact of in-service training on English teachers' classroom practice at primary level. *Journal of Language and Linguistic Studies*, 14(3), 77–103.
- Ayvaz-Tuncel, Z., & Çobanoğlu, F. (2018). In-service teacher training: Problems of the teachers as learners. *International Journal of Instruction*, 11(4), 159–174. <https://doi.org/10.12973/iji.2018.11411a>
- Bandura, A. (1971). *Social learning theory*. General learning press.
- Bane, H. (2015). *Rural school teachers' professional initiative in improving professional competencies in West Shewa Zone, Oromiya Regional State, Ethiopia*.
- Beauchamp, G. (1997). In-service education and training in the classroom. *Journal of In-Service Education*, 23(2), 205–218. <https://doi.org/10.1080/13674589700200011>
- Bruce, J., & Showers, B. (2002). *Student achievement: Through staff development*. ASCD.
- Chen, X. (2013). Meta-teaching: Meaning and strategy. *Africa Education Review*, 10(sup1), S63–S74. <https://doi.org/10.1080/18146627.2013.855431>
- Cooper, D. J. D. (n.d.). Professional development: An effective research-based model. *Professional Development*, 14.
- Copriady, J., Zulnaidi, H., Alimin, M., & Rustaman. (2018). In-service training for chemistry teachers' proficiency: The intermediary effect of collaboration based on teaching experience. *International Journal of Instruction*, 11(4), 749–760. <https://doi.org/10.12973/iji.2018.11447a>
- Craft, A. (2004). *Continuing professional development: A practical guide for teachers and schools*. Routledge: The Open University.
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Fifth). Pearson Education, Inc.
- Desta, D., Chalchisa, D., & Lemma, G. (2013). *School-based continuous teacher professional development in Addis Ababa: An investigation of practices, opportunities and challenges*. 18.
- Gemeda, F. T., Fiorucci, M., & Catarci, M. (2014). Teachers' professional development in schools: Rhetoric versus reality. *Professional Development in Education*, 40(1), 71–88. <https://doi.org/10.1080/19415257.2012.759988>

- Gemeda, F. T., & Tynjälä, P. (2015). Professional learning of teachers in Ethiopia: Challenges and implications for Reform. *Australian Journal of Teacher Education*, 40(5). <https://doi.org/10.14221/ajte.2015v40n5.1>
- Gidalew, T. A., & Van den Berg, G. (2018). The relationship between lecturers' beliefs and their actual methods of reading instruction: An Ethiopian case study. *Reading & Writing*, 9(1). <https://doi.org/10.4102/rw.v9i1.162>
- Ginja, Tamirat Gibon. (2016). Examining practices of active learning approach in Gedeo Zone and Halaba Special Woreda, SNNPR, Ethiopia. *Research on Humanities and Social Sciences*, 6(15), 1–7.
- Goodyear, R. (n.d.). *The Inservice curriculum for teachers: A review of policy, control and balance*. 23.
- Gurung, R. A. R., & Schwartz, B. M. (2009). What Is pedagogical research? In *Optimizing Teaching and Learning* (pp. 1–17). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781444305883.ch1>
- Higgins, J., Parsons, R., & Bonne, L. (2011). *Processes of inquiry: Inservice teacher educators research their practice*. Sense Publishers. <http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9789460915314>
- Kabadayi, A. (2016). A suggested in-service training model based on Turkish preschool teachers' conceptions for sustainable development. *Journal of Teacher Education for Sustainability*, 18(1), 5–15.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. Jossey-Bass A Wiley Brand.
- Ministry of Education. (1994). *Federal Democratic Republic Government of Ethiopia Education and Training Policy*. The Federal Democratic Republic Government of Ethiopia, Ministry of Education (MoE).
- Ministry of Education. (2009). *Continuous Professional Development for Primary and Secondary School Teachers, Leaders, and Supervisors in Ethiopia: The Practical Toolkit*. The Federal Democratic Republic of Ethiopia, Ministry of Education (MoE).
- Ministry of Education. (2010). *Education Sector Development Program IV (ESDP IV) 2010/2011 – 2014/2015 2003 EC – 2007 EC*. The Federal Democratic Republic of Ethiopia, Ministry of Education (MoE).
- Ministry of Education. (2015). *Education Sector Development Program V (ESDP V) 2008—2012 E.C. 2015/16—2019/20 G.C. Program Action Plan*. Addis Ababa, Ethiopia. The Federal Democratic Republic of Ethiopia, Ministry of Education (MoE).
- Peacock, A. (1993). The in-service training of primary teachers in science in Namibia. *British Journal of In-Service Education*, 19(2), 21–26. <https://doi.org/10.1080/0305763930190205>
- People In Need. (n.d.). *LEAD Schools: Leaders in quality education*. People in Need, Hawassa.
- People In Need. (2014). *Modern Teaching Methods for Teachers: Practical guide to active learning methodologies*. People in Need, Addis Ababa, 2014.
- Schunk, D. H. (2012). *Learning theories: An educational perspective*. Pearson.
- Tonga, F. E., Eryiğit, S., Yalçın, F. A., & Erden, F. T. (2019). Professional development of teachers in PISA achiever countries: Finland, Estonia, Japan, Singapore and China. *Professional Development in Education*, 1–17. <https://doi.org/10.1080/19415257.2019.1689521>
- UNESCO. (2013). *Synthesis report: Findings from the needs assessment phase Cote D'ivoire, Ethiopia, Namibia*. UNESCO Headquarters.
- Zhou, M., & Brown, D. (2015). *Educational learning theories: 2nd Edition*. 129.